| <br>idex | <br> |  |
|----------|------|--|
|          |      |  |

| Application/Control No. | Applicant(s)/Patent under Reexamination |
|-------------------------|-----------------------------------------|
| 10/693,191              | ISHIKAWA, TORU                          |
| Examiner                | Art Unit                                |
| Sean Weinman            | 2115                                    |

| √ | Rejected |
|---|----------|
| = | Allowed  |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

Sean Weinman

| A | Appeal   |
|---|----------|
| 0 | Objected |

|             |                            |          |                                     |                  |                                                  | _                                   | ,        |                                     |          |                 |
|-------------|----------------------------|----------|-------------------------------------|------------------|--------------------------------------------------|-------------------------------------|----------|-------------------------------------|----------|-----------------|
| 01.         |                            | Date     |                                     |                  |                                                  |                                     |          |                                     |          |                 |
| Cla         |                            | Ь.       |                                     | <del></del> ,    | ᆜ                                                | Jate                                | =-       |                                     |          | $\dashv$        |
| Final       | Original                   | 90/97/9  |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 1                          | =        | _                                   | ├─               |                                                  | _                                   | -        | _                                   | -        | 러               |
|             | 1                          | -        | -                                   | $\vdash$         | -                                                |                                     | Н        | $\vdash$                            | _        |                 |
|             | 3                          | =        |                                     | ┝                | $\vdash$                                         |                                     |          |                                     | -        | -               |
|             | <u> </u>                   | =        |                                     | $\vdash$         |                                                  |                                     |          |                                     | _        | $\dashv$        |
|             | 1<br>2<br>3<br>4<br>5      | =        | $\vdash$                            |                  |                                                  | -                                   |          | _                                   | _        | $\neg$          |
|             | 6                          | =        | H                                   |                  |                                                  | _                                   | $\vdash$ |                                     |          | $\dashv$        |
|             | 7                          | =        | $\vdash$                            | Т                |                                                  | $\vdash$                            | Н        |                                     |          |                 |
|             | 8                          | =        | _                                   |                  |                                                  |                                     | П        |                                     |          |                 |
|             | 9                          | =        |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 10                         |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 11                         |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 12                         |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 12<br>13<br>14<br>15<br>16 |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 14                         |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 15                         |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 16                         |          |                                     | igsqcup          |                                                  |                                     |          |                                     |          | Ш               |
|             | 17                         | L        |                                     |                  |                                                  | _                                   |          | _                                   |          | Щ               |
|             | 18<br>19                   | <u> </u> |                                     |                  | $oxed{oxed}$                                     | L                                   |          |                                     |          | Щ               |
|             | 19                         | _        | <u> </u>                            |                  |                                                  |                                     | ldash    |                                     |          | Щ               |
| <u> </u>    | 20                         |          | _                                   |                  |                                                  |                                     |          |                                     |          | Ш               |
|             | 21                         |          |                                     | _                |                                                  |                                     | <u> </u> |                                     | L.       | Н               |
|             | 21<br>22<br>23             | ┡        | _                                   | _                | $\vdash$                                         | ╙                                   | <u> </u> | <u> </u>                            | ļ        | Н               |
| <u> </u>    | 23                         | ⊢        | <u> </u>                            | $\vdash$         |                                                  | ┝                                   | $\vdash$ |                                     | <u> </u> | Н               |
| <u> </u>    | 24<br>25                   | ┢        | <u> </u>                            | -                |                                                  | ⊢                                   | $\vdash$ | _                                   | $\vdash$ | Н               |
| -           | 26                         | ├        | ┝                                   |                  |                                                  | -                                   | $\vdash$ |                                     | -        | Н               |
| $\vdash$    | 26<br>27<br>28             | ⊢        | ┝                                   | $\vdash$         | -                                                | -                                   |          |                                     | Н        | Н               |
| <b>—</b>    | 28                         | $\vdash$ | ┢─                                  | H                | ┢                                                |                                     | -        |                                     | Н        | Н               |
|             | 29                         |          | ┢                                   | $\vdash$         | -                                                | $\vdash$                            |          |                                     | Н        | Н               |
|             | 30                         |          | _                                   |                  | <del>                                     </del> | $\vdash$                            | H        | _                                   |          | Н               |
|             | 31                         | $\vdash$ | $\vdash$                            | H                |                                                  | H                                   | T        | Н                                   | Т        | Н               |
|             | 32                         |          |                                     | Г                | Г                                                | ┪                                   | П        | $\vdash$                            |          | П               |
|             | 32<br>33                   | Г        | Т                                   | Т                | Г                                                | T                                   | П        | Г                                   | Γ        | П               |
|             | 34                         | $\vdash$ | ⇈                                   | Г                | l                                                |                                     |          | Г                                   | Г        | П               |
|             | 35                         |          |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 36                         | L        |                                     |                  |                                                  |                                     |          |                                     |          |                 |
|             | 37                         |          |                                     |                  |                                                  |                                     |          |                                     | Ĺ        |                 |
|             | 38                         |          |                                     | $\Box$           |                                                  |                                     |          |                                     |          |                 |
|             | 39                         |          | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | L                | 匚                                                | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |          | L                                   | <u> </u> | Ш               |
| ļ           | 40                         | <u> </u> | _                                   | $ldsymbol{oxed}$ |                                                  | _                                   | _        | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | <u> </u> | Ш               |
| <u> </u>    | 41                         | ـــ      | <u> </u>                            | <u> </u>         | ┞                                                | _                                   | $\vdash$ | <u> </u>                            | <u> </u> | $\vdash \dashv$ |
| <u></u>     | 42                         | $\vdash$ | ┡                                   | <u> </u>         | ⊢                                                | $\vdash$                            | $\vdash$ | $\vdash$                            | ⊢        | $\vdash$        |
| <u> </u>    | 43                         | ├-       | $\vdash$                            | ├-               | $\vdash$                                         | ├-                                  |          | -                                   | $\vdash$ | $\vdash\vdash$  |
| <u> </u>    | 44<br>45                   | ├—       | ⊢                                   |                  | $\vdash$                                         | $\vdash$                            | $\vdash$ | $\vdash$                            |          | $\vdash\vdash$  |
| -           | 45                         | -        | ⊢                                   | ╁                | ├-                                               | $\vdash$                            | $\vdash$ | ┝                                   | -        | $\vdash$        |
| $\vdash$    | 47                         | ╁        | -                                   | $\vdash$         | $\vdash$                                         | $\vdash$                            | $\vdash$ | -                                   | -        | Н               |
| <del></del> | 48                         | $\vdash$ | -                                   | $\vdash$         | $\vdash$                                         | -                                   | ┢┈       | -                                   | -        | Н               |
| $\vdash$    | 49                         | $\vdash$ | $\vdash$                            | ┼                | $\vdash$                                         | $\vdash$                            | $\vdash$ | ┢                                   | $\vdash$ | $\vdash \vdash$ |
| <b></b>     | 173                        | ₩        | ٠.                                  | $\vdash$         | ₩                                                | -                                   | ٠        | -                                   | ↓        | ⊷               |

| Cla          | im                   | Date         |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|--------------|----------------------|--------------|--------------|-------------------|--------------------------------------------------|----------|----------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|              |                      |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
| ایرا         | Original             |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
| Final        | iĝi                  |              |              |                   | ŀ                                                |          |          |                                                  |                                                  |                                                  |
| ш            | ŏ                    |              |              |                   | ŀ                                                |          |          |                                                  |                                                  |                                                  |
|              |                      |              |              | Ш                 |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 51                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 52                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 52<br>53             |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 54                   | _            | _            | $\vdash$          | -                                                | Н        |          | -                                                |                                                  |                                                  |
|              | 54<br>55             |              | _            |                   | Η-                                               | -        |          |                                                  |                                                  |                                                  |
|              | 55                   | _            | -            | _                 |                                                  | ⊢        |          |                                                  | Н                                                | _                                                |
|              | 56                   |              | _            | _                 | _                                                | _        |          |                                                  | _                                                |                                                  |
|              | 57                   |              |              |                   |                                                  | L        |          |                                                  | Щ                                                |                                                  |
|              | 58<br>59             |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 59                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 60                   | _            |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 61                   |              |              | $\vdash$          | <del> </del>                                     | -        |          | $\vdash$                                         |                                                  |                                                  |
|              | 62                   | Н            |              | ┝                 | -                                                |          |          | Н                                                | _                                                | _                                                |
|              | 02                   |              | _            | ├                 | ├-                                               | <u> </u> | $\vdash$ | H                                                | -                                                |                                                  |
|              | 63                   |              |              | ╙                 | -                                                | ļ        | _        |                                                  | $\vdash$                                         |                                                  |
|              | 64<br>65             | ليا          |              | $ldsymbol{f eta}$ |                                                  | L.       |          |                                                  | Ш                                                |                                                  |
|              | 65                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 66<br>67             |              |              |                   | Γ                                                |          |          |                                                  |                                                  |                                                  |
|              | 67                   | П            |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 68                   |              |              |                   | Т                                                | _        | _        | _                                                | $\vdash$                                         | _                                                |
|              | 60                   | -            | $\vdash$     | $\vdash$          | ⊢                                                | -        | -        |                                                  | ⊢                                                | _                                                |
| _            | 69<br>70             | Н            | ⊢            | -                 | <u> </u>                                         | -        | ⊢        | ⊢                                                | ┢                                                | <u> </u>                                         |
|              | 70                   | _            | _            | _                 | <u> </u>                                         | <u> </u> | <u> </u> |                                                  | <u> </u>                                         | _                                                |
|              | 71                   |              |              | 匚                 |                                                  | L_       | <u> </u> |                                                  | L_                                               |                                                  |
|              | 72                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 73                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 72<br>73<br>74<br>75 |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 75                   |              |              |                   |                                                  | Т        | Г        |                                                  | Т                                                |                                                  |
| <u> </u>     | 76                   |              | $\vdash$     | Н                 | $\vdash$                                         | Ι        |          |                                                  |                                                  |                                                  |
| ├─           | 77                   |              | ⊢            | -                 | -                                                | ┝        | _        |                                                  | -                                                |                                                  |
|              | 77<br>78             |              | ⊢            | ⊢                 | -                                                | _        | -        | _                                                | _                                                |                                                  |
| <u> </u>     | /8                   | <u> </u>     | ļ            | <u> </u>          | <u> </u>                                         | Ь        | ┡        | <u> </u>                                         |                                                  | _                                                |
|              | 79                   | L            | _            | L                 | _                                                | _        | _        |                                                  |                                                  |                                                  |
|              | 80<br>81             |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 81                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 82                   |              | Г            |                   |                                                  | Γ        |          |                                                  |                                                  |                                                  |
| $\vdash$     | 83                   |              |              | Т                 | Г                                                |          |          | Г                                                | -                                                |                                                  |
| <u> </u>     | 84                   | -            |              | $\vdash$          | -                                                | -        | ╁─╴      | $\vdash$                                         | ┢                                                | _                                                |
| <del> </del> | 04                   | <del> </del> | $\vdash$     | $\vdash$          | $\vdash$                                         | $\vdash$ | $\vdash$ | $\vdash$                                         | -                                                | <u> </u>                                         |
| ⊢—           | 85                   | $\vdash$     | $\vdash$     |                   | ⊢                                                | $\vdash$ | ⊢        | $\vdash$                                         |                                                  | -                                                |
| <u> </u>     | 86                   | <b>—</b>     | L.           | ļ                 | L-                                               | 1_       | ╙        | <b>—</b>                                         | <b>_</b>                                         | <u> </u>                                         |
|              | 87                   |              |              | $oxed{oxed}$      |                                                  | _        | <u> </u> | Щ                                                | _                                                | <u> </u>                                         |
|              | 88                   | L            | L            | L                 | L                                                | L        |          | L                                                | L                                                |                                                  |
|              | 89                   |              |              |                   |                                                  |          |          |                                                  | l                                                |                                                  |
|              | 90                   |              |              |                   |                                                  |          |          |                                                  |                                                  |                                                  |
|              | 91                   |              | Т            | Т                 |                                                  | Г        | Г        | Г                                                | <u> </u>                                         |                                                  |
| <del> </del> | 92                   | $\vdash$     |              | $\vdash$          | $\vdash$                                         | H        | $\vdash$ | <del>                                     </del> | <del>                                     </del> | <del>                                     </del> |
| <del> </del> | 02                   | $\vdash$     | $\vdash$     | ╁                 | <del>                                     </del> | $\vdash$ | $\vdash$ | $\vdash$                                         | $\vdash$                                         | $\vdash$                                         |
| <u> </u>     | 93                   |              | -            | -                 | $\vdash$                                         | ├        |          |                                                  | -                                                | -                                                |
|              | 94                   | <u> </u>     | _            | ▙                 | <b> </b> _                                       | ₩        | ļ        | <u> </u>                                         | <u> </u>                                         | $\vdash$                                         |
|              | 95                   | L            | <u></u>      | <u> </u>          | Ш                                                | <u> </u> | <u>L</u> | L                                                | L_                                               | $ldsymbol{ldsymbol{eta}}$                        |
|              | 96                   | L            | L            | L                 | L                                                | L        | L        |                                                  | L                                                |                                                  |
|              | 97                   |              |              |                   |                                                  | Γ        |          |                                                  |                                                  | l                                                |
|              | 98                   | Г            | Г            | T                 |                                                  | T        | T        | Г                                                |                                                  |                                                  |
| $\vdash$     | 99                   | _            | $\vdash$     | 一                 | Т                                                | T        | $\vdash$ | $t^-$                                            | Т                                                | Т                                                |
| $\vdash$     | 100                  | -            | <del> </del> | +-                | $\vdash$                                         | ╁╌       | ├-       | ╁                                                | $\vdash$                                         | $\vdash$                                         |
| Щ_           | 100                  | L            | L            | Ц                 | Щ                                                | <u> </u> | Ц_       | Ц_                                               | L                                                | Щ                                                |

| Cla                                              | aim                      | Date           |            |                                |               |          |          |          |          |                      |
|--------------------------------------------------|--------------------------|----------------|------------|--------------------------------|---------------|----------|----------|----------|----------|----------------------|
| Final                                            | Original                 |                |            |                                |               |          |          |          |          |                      |
|                                                  | 101<br>102               |                |            |                                |               |          |          |          |          |                      |
|                                                  | 102                      |                |            |                                |               |          |          |          |          | Ш                    |
|                                                  | 103                      | $\vdash$       |            | Н                              |               |          |          |          | $\vdash$ | $\dashv$             |
|                                                  | 104<br>105               | Н              | -          |                                |               |          |          |          |          | 러                    |
|                                                  | 106                      | Н              |            |                                |               | _        |          |          |          | $\vdash$             |
|                                                  | 107                      | П              |            |                                | $\overline{}$ |          |          |          |          |                      |
|                                                  | 108                      |                |            |                                |               |          |          |          |          |                      |
|                                                  | 109                      |                |            |                                |               |          |          |          |          | Ш                    |
|                                                  | 110                      |                |            | $\vdash$                       |               | _        |          |          |          | Н                    |
|                                                  | 111                      |                | $\vdash$   | H                              | -             |          | ļ        |          | $\vdash$ | $\vdash\vdash\vdash$ |
|                                                  | 112<br>113<br>114        |                | H          | $\vdash$                       | -             | _        |          | $\vdash$ | $\vdash$ | $\vdash$             |
|                                                  | 114                      |                | Т          | _                              |               | Т        | $\vdash$ |          |          | Н                    |
|                                                  | 115                      |                |            |                                |               |          |          |          |          |                      |
|                                                  | 116                      |                |            |                                |               |          |          |          |          |                      |
|                                                  | 117                      |                | L          | ļ                              |               |          | <u> </u> |          |          | -                    |
|                                                  | 118<br>119               |                | -          | -                              |               | _        | ┝        |          | -        | Н                    |
|                                                  | 120                      | -              |            | $\vdash$                       |               |          |          |          | _        | Н                    |
|                                                  | 121                      | -              | $\vdash$   |                                | _             |          | -        |          |          | Н                    |
|                                                  | 120<br>121<br>122        | -              | ┢          | H                              |               |          | _        |          |          | Н                    |
|                                                  | 123<br>124<br>125        |                |            |                                |               |          |          |          |          |                      |
|                                                  | 124                      |                |            |                                |               | L        | L        |          |          | Ш                    |
|                                                  | 125                      | <u> </u>       | ļ          | <u> </u>                       | <u> </u>      | <u> </u> | ļ        |          |          | Н                    |
|                                                  | 126<br>127<br>128<br>129 | ⊢              | ├          | ┝                              | -             | -        |          |          | <u> </u> | Н                    |
|                                                  | 128                      | <del> </del> - | ┝┈         | <del> </del>                   | $\vdash$      | _        | ┢╾       | $\vdash$ | $\vdash$ | H                    |
|                                                  | 129                      | t              | $\vdash$   |                                |               |          | $\vdash$ | <u> </u> | -        | П                    |
|                                                  | l 130                    |                |            |                                |               |          |          |          |          |                      |
|                                                  | 131<br>132<br>133        |                |            |                                |               |          |          |          |          |                      |
|                                                  | 132                      | L              | <u> </u>   | <u> </u>                       | ļ             | L        | <u> </u> |          | <u> </u> | $\square$            |
|                                                  | 133                      | ⊢              |            | _                              | ⊢             | <u> </u> | ļ        | <u> </u> | $\vdash$ | $\vdash$             |
|                                                  | 134<br>135               | ├              |            | ┢                              |               | ┝        | ⊢        | ┝        | <u> </u> | Н                    |
|                                                  | 136                      | $\vdash$       | -          | $\vdash$                       |               | -        | H        | ┢        |          | H                    |
|                                                  | 137                      | $\vdash$       | <u> </u>   | m                              | -             | -        |          | T        |          | Н                    |
|                                                  | 137<br>138               |                |            |                                |               |          |          |          |          |                      |
|                                                  | 139                      |                |            |                                |               |          | L_       |          |          |                      |
| <u> </u>                                         | 140                      | ├              | <u> </u>   | <u> </u>                       | $\vdash$      | <u> </u> | L        | <u> </u> | <u> </u> | Н                    |
| <del> </del>                                     | 141<br>142               | ├              | $\vdash$   | -                              | ┝             |          | ├        | -        | $\vdash$ | $\vdash\vdash$       |
|                                                  | 143                      | ⊢              | +-         | $\vdash$                       | ├-            | ┝╌       | $\vdash$ | -        | -        | Н                    |
| <del>                                     </del> | 144                      | $\dagger$      | $\vdash$   | $\vdash$                       | $\vdash$      | $\vdash$ | -        | -        |          | H                    |
|                                                  | 145                      | T              |            |                                |               |          |          |          |          |                      |
|                                                  | 146                      |                |            |                                |               |          |          |          |          |                      |
|                                                  | 147                      |                | $ar{\Box}$ | $oxedsymbol{oxedsymbol{oxed}}$ | _             |          | L        |          |          | Ш                    |
| <u> </u>                                         | 148                      | $\vdash$       | _          | $\vdash$                       | <u> </u>      | _        | <u> </u> | <u> </u> | L        | Н                    |
| <u> </u>                                         | 149                      | $\vdash$       | $\vdash$   | ┡                              | -             | ├-       | ├-       | $\vdash$ | $\vdash$ | Н                    |
| Щ                                                | 150                      | <u>L</u>       | L_         | <u> </u>                       | L             | L        | <u></u>  |          | Ц_       | ш                    |